

REMARKS

Claims 1-38 were rejected by the Examiner. Claims 1-38 are still pending. Claims 1, 15, 19, 25, 27, 29, and 36 have been amended. Reconsideration is respectfully requested in view of the amendments above and the following remarks.

Claim Rejections under 35 U.S.C. § 103(a)

Claims 1, 3-27, 29-34, and 36-38 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,857,201 issued to Wright et al. (hereinafter referred to as "Wright") and further in view of U.S. Patent No. 5,295,222 issued to Wadhwa et al. (hereinafter referred to as "Wadhwa").

Claim 2 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Wright as applied to claim 1 above, and further in view of U.S. Patent No. 6,880,126 issued to Bahrs et al.

Claim 28 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Wright as applied to claim 27, and further in view of U.S. Patent No. 6,754,670 to Lindsay et al.

Claim 35 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Wright as applied to claim 29 above, and further in view of U.S. Patent No. 5,604,906 issued to Murphy et al. Applicants respectfully traverse.

Wright discloses a system whereby software programs running on client devices are permitted to utilize occasional connections in lieu of persistent connections and which are further permitted to operate over low-performance, low-overhead communication channels. In their proposed method, Wright et al. detail an application based, programmatic solution directed to improving the capability of custom designed programs.

In general, the system of Wright proposes creating pared down, shadow applications representing one or more enterprise backend applications for execution on remote, frequently disconnected client systems. In Wright's concept, while a client device is disconnected from a desired enterprise backend application, the client device is able to operate a shadow version of a desired enterprise backend application as if connected to the actual backend application. Periodically, when the client device is connected to the backend application, the shadow version and the enterprise backend application will synchronize. It is in this manner Wright proposes a system

to support applications on mobile computing devices that do not rely on persistent connections to existing enterprise systems.

Wadhwa discloses computer-aided software engineering facilities designed to assist programmers or system developers in the design, development and testing of computer programs for use in multiprocessor systems. (1:16-19.) Wadhwa teaches little more than object oriented programming using database structures to generate hardware platform specific applications for use in multiplatform environments.

In their proposed method, Wadhwa et al. teach an object oriented design methodology where a collection of modularized program elements, many of which are little more than database structures, defining a desired application are subjected to appropriate brute force translation to generate hardware platform specific code usable on specified platforms in a multiprocessor system. To this end, Wadhwa seeks to address the situation where "a programmer must code the various distributed programs in the language supported by [myriad hardware platforms in the multiprocessor system] environment." (2:43-45.) To simplify the programming necessary to deploy a single application across the myriad hardware platforms deployed in many multiprocessor environments, Wadhwa leverages modularized data, rules, flow, and other aspects of program operation, to develop a generic, base application. According to Wadhwa, the generic, base application is then translated into a software application compatible with each distinct hardware platform making up a target multiprocessor system. (2:63-66, 3:6-29, 6:38-18:32.) At an appropriate time, the platform specific software applications are distributed to designated nodes in a target multiprocessor system.

"To design any application using the CASE facility, a developer must decompose the application into specified logical parts, and assemble them into a program." (6:39-42.) "The different parts of an application are expressed as entities and are linked by relationships." (6:44-46.)

Defined generally, an entity is something real or abstract about which information is recorded. The information is organized into a set of characteristics, known as attributes. For example, collected information about employees of a company could be placed in an entity type called Employee. The attributes for that entity could be a name, social security number, home address, age, birth date, department, etc. An entity called Organization would include attributes such as organization name, address, type of organization (such as partnership or corporation), etc. ...

An association between entities is known as a relationship. For example in FIG. 3 the entity, Organization 1, is now linked to the entity, Employee, by the relationship, Employs 3. Relationships are also defined by attributes. (6:47-63.)

This passage illustrates that the “entities” of Wadhwa are nothing more than “something real or abstract about which information is recorded” and teaches that “entity-relationship” models are little more than database schema used in creating code for a variety of hardware platforms. Thus Wadhwa does not teach the data models disclosed and claimed by Applicants. In particular, Wadhwa does not teach, suggest, or otherwise disclose, at a minimum, the data model defining one or more data elements, data relationships, data dependencies, and data distribution attributes required fro interfacing a mobile software application with at least one of a plurality of backend applications of Applicants’ invention.

In addition to the failure of Wright and Wadhwa, alone or in combination, to teach Applicants’ invention as claimed, the references are also devoid of any motivation for their combination. In fact, the Examiner cites no specific portion of either Wright or Wadhwa suggesting their combination, instead asserting that it “would have been obvious to one of ordinary skill in the art at the time the invention was made to use Wadhwa’s data model including data relationship attributes with Wright’s software platform.” Thus, leaving to argument elsewhere herein that Wadhwa fails to disclose a “data model” as such is defined by Applicants’ invention, Applicants respectfully submit that the combination of Wadhwa and Wright as a basis for rejection of the present claims under 35 U.S.C. § 103 is improper.

As previously established, Wright discloses a system whereby software programs running on client devices are permitted to utilize occasional connections in lieu of persistent connections and which are further permitted to operate over low-performance, low-overhead communication channels. In Wright’s concept, while a client device is disconnected from a desired enterprise backend application, the client device is able to operate a shadow version of a desired enterprise backend application as if connected to the actual backend application. Periodically, when the client device is connected to the backend application, the shadow version and the enterprise backend application will synchronize. It is in this manner Wright proposes a system to support applications on mobile computing devices that do not rely on persistent connections to existing enterprise systems. In stark contrast, Wadhwa discloses a system for easily generating code usable on a variety

of distinct hardware platforms in a multiplatform multiprocessor system. Specifically, Wadhwa defines multiprocessor systems as “the use of a network of processors each dedicated to specific aspects of a computer system.” (1:67-2:2.) Further, Wadhwa states that an “efficient multiprocessing system encourages data sharing and the use of dedicated PC’s [sic] for as many tasks as possible.” (2:12-14.) As mentioned above, Wadhwa proposes a solution whereby a generic, base application is developed from modularized data, program rules and flow, etc. From the generic, base application Wadhwa then creates hardware platform specific versions of the generic, base application for each distinct hardware platform deployed in a target multiprocessor system. Thus, from the disparate problems and solutions addressed in each reference, there is no motivation to combine the teachings of Wright and Wadhwa.

Distinct from the teachings of Wright and Wadhwa, the present invention is unique in at least the aspect that it defines and leverages the concept of data models. As described in the specification of the present application, a data model is distinguishable from programmatic models in a number of respects. Significantly, the data model of the present invention can be starkly contrasted with a programmatic model in at least the respect that the data model of the present invention is decoupled from a particular client interface or enterprise data source – the service objects of Wright are application program interfaces (API) facilitating one or more operations to be performed between a client device and a server system (see, *e.g.*, 3:54-4:4), the “communications agents are designed to encompass the fundamental operations that are needed to exchange data between a client and a host for a particular application” (see, *e.g.*, 7:7-10), and Wadhwa teaches translating generic program elements into specific solutions for selected hardware platforms. In addition to being decoupled from a particular client interface or enterprise data source, the present invention can be differentiated through the present invention’s utilization of a data model which independently describes data attributes required for a mobile software application to interface with a backend application, including transactions, connections between individual data elements, relationships and dependency relationships, as well as distribution attributes.

In light of the above, it is evident Wright and Wadhwa, alone or in combination, fail to anticipate, disclose, teach or otherwise suggest a method including, among other steps, “distributing the software platform to a second enterprise, the software platform including a data modeling program allowing creation of a data model defining a data model defining data elements, data

relationships, data dependencies and data distribution attributes required for interfacing a mobile software application with at least one of the plurality of backend applications and a deployment feature allowing deployment of at least a portion of the data model to a plurality of mobile computing devices” as claimed in Applicants’ amended claim 1. Accordingly, Applicants respectfully request that the Examiner reconsider the rejection to Claim 1, withdraw the rejection and allow Claim 1.

Claims 2-14 depend from and provide further patentable limitations to independent Claim 1. Applicants respectfully request that the Examiner reconsider the rejection to Claims 2-14, withdraw the rejections and allow Claims 2-14.

Similarly, Wright and Wadhwa, alone or in combination, fail to anticipate, disclose, teach or otherwise suggest a system integration method including, among other elements, “an integration unit operable to access a backend application of the first enterprise network, the integration unit further operable to access a first data model defining data elements, data relationships, data dependencies and data distribution attributes required for interfacing a mobile software application with a backend application and referencing at least one enterprise object associated with the backend application” as claimed in Applicants’ amended claim 15. Accordingly, Applicants respectfully request that the Examiner reconsider the rejection to Claim 15, withdraw the rejection and allow Claim 15.

Wright and Wadhwa, alone or in combination, further fail to anticipate, disclose, teach or otherwise suggest a method further comprising “developing a mobile software application for deployment on a mobile computing device, the mobile software application operable to reference one or more data elements, data relationships, data dependencies and data distribution attributes of the first data model when interfacing with a backend application” as claimed in Applicants’ amended Claim 19. Accordingly, Applicants respectfully request that the Examiner reconsider the rejection to Claim 19, withdraw the rejection and allow Claim 19.

Claims 16-24 depend from and provide further patentable limitations to independent Claim 15. Applicants respectfully request that the Examiner reconsider the rejections to Claims 16-24, withdraw the rejections and allow Claims 16-24.

Further, Wright and Wadhwa, alone or in combination, fail to anticipate, disclose, teach or otherwise suggest a method of distributing a software platform including, among other elements, “a software tool for creating a mobile data model, the mobile data model associated with data from the

enterprise software system and defining data elements, data relationships, data dependencies and data distribution attributes required for interfacing a mobile software application with the enterprise software system” as claimed in Applicants’ amended Claim 25. Accordingly, Applicants respectfully request that the Examiner reconsider the rejection to Claim 25, withdraw the rejection and allow Claim 25.

Claim 26 depends from and provides further patentable limitations to independent Claim 25. Applicants respectfully request that the Examiner reconsider the rejection to Claim 26, withdraw the rejections and allow Claim 26.

Further, Wright and Wadhwa, alone or in combination, fail to anticipate, disclose, teach or otherwise suggest a method including, among other elements, “mobility deployment code for deploying at least a portion of a data model defining one or more data element, data relationship, data dependency and data distribution attributes required for interfacing a mobile software application with an enterprise backend application or object to a mobile computing device” as claimed in Applicants’ amended Claim 27. Accordingly, Applicants respectfully request that the Examiner reconsider the rejection to Claim 27, withdraw the rejection and allow Claim 27.

Claim 28 depends from and provides further patentable limitations to independent Claim 27. Applicants respectfully request that the Examiner reconsider the rejection to Claim 28, withdraw the rejections and allow Claim 28.

In addition, Wright and Wadhwa, alone or in combination, fail to anticipate, disclose, teach or otherwise suggest a method including, among other elements, “mobility deployment code for deploying at least a portion of a data model defining data elements, data relationships, data dependencies and data distribution attributes required for interfacing a mobile software application with an enterprise backend application or object to a mobile computing device” as claimed in Applicants’ amended claim 29. Accordingly, Applicants respectfully request that the Examiner reconsider the rejection to Claim 29, withdraw the rejection and allow Claim 29.

Claims 30-35 depend from and provide further patentable limitations to independent Claim 29. Applicants respectfully request that the Examiner reconsider the rejection to Claims 30-35, withdraw the rejection and allow Claims 30-35.

Finally, Wright and Wadhwa, alone or in combination, fail to anticipate, disclose, teach or otherwise suggest a method comprising, among other elements, “mobility deployment code for

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deploying at least a portion of a data model defining data elements, data relationships, data dependencies and data distribution attributes required for interfacing a mobile software application with an enterprise backend application or object to a mobile computing device" as claimed in Applicants' amended Claim 36. Accordingly, Applicants respectfully request that the Examiner reconsider the rejection to Claim 36, withdraw the rejection and allow Claim 36.

Claims 37-38 depend from and provide further patentable limitations to independent Claim 36. Applicants respectfully request that the Examiner reconsider the rejections to Claims 37-38, withdraw the rejections and allow Claims 37-38.

CONCLUSION

In light of the remarks set forth above, Applicants believe that they are entitled to a letters patent in the present matter. Applicants respectfully solicit the Examiner to expedite prosecution of this patent application to issuance. Should the Examiner have any questions or feel that further prosecution of this matter may be expedited through an interview, the Examiner is encouraged to telephone the undersigned.

The Commissioner is authorized to charge any additional fees which may be required, including petition fees and extension of time fees, to Deposit Account No. 23-2415 (Docket No. 26625-703).

Respectfully submitted,

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